



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :

G06F 9/44, 17/30

A1

(11) International Publication Number:

WO 99/52032

(43) International Publication Date:

14 October 1999 (14.10.99)

(21) International Application Number: PCT/US99/07637

(22) International Filing Date: 7 April 1999 (07.04.99)

(30) Priority Data:

09/057,394

8 April 1998 (08.04.98)

US

(71) Applicant: GEOWORKS CORPORATION [US/US]; 960 Atlantic Avenue, Alameda, CA 94501 (US).

(72) Inventors: DE BOOR, Adam; 909 Marina Village Parkway, Alameda, CA 94501 (US). EGGERS, Michael, D.; 2160 La Cuesta Avenue, Oakland, CA 94611 (US).

(74) Agents: SACHS, Robert, R. et al.; Fenwick &amp; West LLP, Two Palo Alto Square, Palo Alto, CA 94306 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

## Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: WIRELESS COMMUNICATION DEVICE WITH MARKUP LANGUAGE BASED MAN-MACHINE INTERFACE

## (57) Abstract

A system, method, and software product provide a wireless communications device with a markup language based man-machine interface. The man-machine interface provides a user interface for the various telecommunications functionality of the wireless communication device, including dialing telephone numbers, answering telephone calls, creating messages, sending messages, receiving messages, establishing configuration settings, which is defined in markup language, such as HTML, and accessed through a browser program executed by the wireless communication device. This feature enables direct access to Internet and World Wide Web content, such as Web pages, to be directly integrated with telecommunication functions of the device, and allows Web content to be seamlessly integrated with other types of data, since all data presented to the user via the user interface is presented via markup language-based pages. The browser processes an extended form of HTML that provides new tags and attributes that enhance the navigational, logical, and display capabilities of conventional HTML, and particularly adapt HTML to be displayed and used on wireless communication devices with small screen displays. The wireless communication device includes the browser, a set of portable components, and portability layer. The browser includes protocol handlers, which implement different protocols for accessing various functions of the wireless communication device, and content handlers, which implement various content display mechanisms for fetching and outputting content on a screen display.

